WAFER SUPPORT SYSTEM

Abstract of the Disclosure

A wafer support system comprising a segmented susceptor having top and bottom sections and gas flow passages therethrough. A plurality of spacers projecting from a recess formed in the top section of the susceptor support a wafer in spaced relationship with respect to the recess. A sweep gas is introduced to the bottom section of the segmented susceptor and travels through the gas flow passages to exit in at least one circular array of outlets in the recess and underneath the spaced wafer. The sweep gas travels radially outward between the susceptor and wafer to prevent back-side contamination of the wafer. The gas is delivered through a hollow drive shaft and into a multi-armed susceptor support underneath the susceptor. The support arms conduct the sweep gas from the drive shaft to the gas passages in the segmented susceptor. The gas passages are arranged to heat the sweep gas prior to delivery underneath the wafer. Short purge channels may be provided to deliver some of the sweep gas to regions surrounding the spacers to cause a continuous flow of protective purge gas around the spacers. A common bottom section may cooperate with a plurality of different top sections to form segmented susceptors suitable for supporting various sized wafers.

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